

156265

Friday, January 27, 2017 12:51:09 PM

N900040100

Setup Start *NS1*

Stop *NS2*

1

Cust Item ID:

1

Customer:

DAS

21

Date: FEB 01 2017

Date:

Run Start *NR1*

Date:

Date:

Stop *NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
QC / QA Coordinator Approval									

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Work Order ID 156265

Friday, January 27, 2017 12:51:09 PM

156265

Page 2

Item ID: 646.4001 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: AS350 Cable Cutter System
Start Date: 2/1/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/8/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Packaging	0.00				DAS 28 9-89		FEB 23 2017	DAS 27 9-89
130	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP 646.4001								
Packaging	Location: <u>Eg 102</u>								
140	QC21- Final Inspection - Work Order Release	0.00				DAS 21 9-89		FEB 23 2017	
140	Memo	0.02							
QC									
Quality Control						DAS 21 9-89		FEB 23 2017	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause			FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐						

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156265

646 4001

Required Date: 2/8/2017

Required Qty: 1.00

Comments: IPP REV:A 12.10.23 NEW ISSUE DD VERF:JLM
IPP REV:B 15.01.08 AS PER DWG REV.B DD VERF:JLM IPP
REV:C 16.01.07 AS PER DWG REV.C DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
600.0129		Purchased	No			100	f	176.0000	8	8			
600 0129 VHB TAPE 75935A651 DAS 28 9-89 Location CCK096 m135867 Loc Qty 176 176 Loc Code 8 feet 8 9-89 FEB 21 2017 DAS 27 9-89													
600.0990		Purchased	No			100	Each	27.0000	1	1			
600 0990 Magnabond 6398 Part A Size 112 ml 05/08/2017 DAS 28 9-89 Location PKG M135600 M136142 M136586 M134249 Loc Qty 27 2 12 12 1 Loc Code 1/1/2017 1 DAS 27 9-89													
600.0991		Purchased	No			100	Each	26.0000	1	1			
600 0991 Magnabond 6398 Part B Size 112 ml 05/08/2017 DAS 28 9-89 Location PKG m135600 m136142 m136586 Loc Qty 26 2 12 12 Loc Code 1 DAS 27 9-89													

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

600.1012
600 1012
Sealant PR1425B2 (#654 sem)

Purchased No

100 Each 16.0000 1 1

**

DAS
6
9-89

FEB 27 2017
9-89

Location

Loc Qty

Loc Code

cck017

16

m136554

8

m136586

8

600.1013
600 1013
021200-3M TAPE PRIMER 94 PRIMER 24216

Purchased No

100 Each 75.0000 5 5

**

DAS
6
9-89

FEB 27 2017
9-89

Location

Loc Qty

Loc Code

CCK096

75

m136345

75

646.2910
646 2910
Deflector

Manufactured No

100 Each 6.0000 1 1

**

DAS
6
9-89

FEB 21 2017
9-89

Location

Loc Qty

Loc Code

CCK050

6

151647

6

646.3001
646 3001
Lower Cable Cutter Assembly

Manufactured No

100 Each 4.0000 1 1

**

DAS
6
9-89

FEB 21 2017
9-89

Location

Loc Qty

Loc Code

cck018

1

151016

1

ST018

3

151685

3

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Page 3

Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

646.3110
646 3110
Channel

DAS
28
9-89

Manufactured No

100 Each

11.0000

1
**

DAS
6
9-89
FEB 2 1 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

11

152235

11

646.3210
646 3210
Support

DAS
28
9-89

Manufactured No

100 Each

8.0000

1
**

DAS
6
9-89
FEB 2 1 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

cck020

8

150684

1

151669

7

646.3301
646 3301
Upper Cutter Assembly

DAS
28
9-89

Manufactured No

100 Each

3.0000

1
**

DAS
6
9-89
FEB 2 1 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

cck018

3

149304

2

151655

1

646.3510
646 3510
Strut

DAS
28
9-89

Manufactured No

100 Each

11.0000

1
**

DAS
6
9-89
FEB 2 1 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

cc104

1

140979

1

CCK108A

10

152366

10

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Shop Packet Print

Page 3

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By 	
								Lead hand / Supervisor Approval Verification 	
QC / QA Coordinator Approval 									

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

646.3511 Manufactured No

100 Each

3.0000

1 1

646 3511

Strut

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

3

141499

1

153990

2

646.3610

Manufactured No

100 Each

9.0000

1 1

646 3610

Filler

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

9

150485

1

151687

8

646.3710

Manufactured No

100 Each

31.0000

1 1

646 3710

Doubler

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

CCK006

31

140753

1

152594

30

646.3711

Manufactured No

100 Each

10.0000

1 1

646 3711

Clip

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck104

10

151670

10

DAS
28
9-89

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Page 4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

646.3712
646 3712
Clip

DAS
28
9-89

Manufactured No

100 Each

6.0000

1 1
**

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

Location

Loc Qty

Loc Code

cck104

6

151018

6

100 Each

12.0000

1 1
**

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

646.3713
646 3713
Gusset

DAS
28
9-89

Manufactured No

Location

Loc Qty

Loc Code

cck105

12

151646

12

100 Each

12.0000

1 1
**

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

646.3714
646 3714
Gusset

DAS
28
9-89

Manufactured No

Location

Loc Qty

Loc Code

cck105

12

151643

12

100 Each

6.0000

2 2
**

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

646.3715
646 3715
Strut Doubler

DAS
28
9-89

Manufactured No

Location

Loc Qty

Loc Code

cck105

6

151668

6

100 Each

11.0000

1 1
**

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

646.3716
646 3716
Gauge Bracket

DAS
28
9-89

Manufactured No

Location

Loc Qty

Loc Code

cck105

11

140845

11

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER :									

Friday, January 27, 2017 12:51:06 PM

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
QC / QA Coordinator Approval 									

Root Cause				FAULT CATEGORY			
☐ Environment	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
☐ Design	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
☐ Doc/Data	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
☐ Equip/Tooling	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
☐ Handling/Pre	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
☐ Material	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
☐ Internal Transport	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
☐ Tribal Knowledge	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
☐ LOA	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
☐ Substation	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
☐ Past Expiry Date	☐ Manufacturing Process	OTHER : 					
☐ Misidentified	☐ Past Due						

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Page 7

Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

646.3812 Manufactured No

100 Each

6.0000

2 2

646 3812

Gusset Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

6

151644

6

646.3813

Manufactured No

100 Each

8.0000

1 1

646 3813

AS350 Strut Bracket

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

8

150933

3

152765

5

646.3910

Manufactured No

100 Each

25.0000

4 4

646 3910

Shim

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

5

150627

5

CCK108A

20

151458

20

646.3911

Manufactured No

100 Each

21.0000

1 1

646 3911

Shim

DAS
28
9-89

Location

Loc Qty

Loc Code

CCK106

21

126059

5

126229

16

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

650.9201 Manufactured No

100

Each

6.0000

2

2

650 9201

Eyelet Bracket Assembly

DAS
28
9-89

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

cck126

6

150359

6

100

Each

568.0000

10

10

AN3-11A

Purchased

No

AN3-11A

Bolt

DAS
28
9-89

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

over003

456

153855

356

m136192

100

ST349

112

153855

112

100

Each

350.0000

2

2

AN3-12A

Purchased

No

AN3-12A

Bolt

DAS
28
9-89

**

DAS
6
9-89

FEB 21 2017

DAS
27
9-89

Location

Loc Qty

Loc Code

over003

206

153854

206

ST349

144

m135603

144

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-13A
Purchased No
AN3-13A
Bolt

100 Each 71.0000 1 1

**

DAS 27
6 FEB 21 2017 9-89

Location	Loc Qty	Loc Code
GA	16	
m127070	16	
ST349	55	
153845	54	
m136406	1	

DAS 28
9-89

AN316C4R
Purchased No
AN316C4R
Nut, Jam

100 Each 59.0000 2 2

**

DAS 27
6 FEB 21 2017 9-89

Location	Loc Qty	Loc Code
ST331	59	
153850	50	
m136192	9	

DAS 28
9-89

AN3-3A
Purchased No
AN3-3A
Bolt

100 Each 195.0000 4 4

**

DAS 27
6 FEB 21 2017 9-89

Location	Loc Qty	Loc Code
ST350	195	
m136199	95	
m136643	100	

DAS 28
9-89

AN3-4A
Purchased No
AN3-4A
Bolt

100 Each 418.0000 10 10

**

DAS 27
6 FEB 21 2017 9-89

Location	Loc Qty	Loc Code
ST350	418	
m135704	85	
m136579	333	

DAS 28
9-89

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Page 11

Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

AN3-5A
AN3-5A
Bolt

Purchased No

100 Each 301.0000 2 2
**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST350

301

m135058
m136182

1
300

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

AN3-6A
AN3-6A
Bolt

Purchased No

100 Each 237.0000 2 2
**

DAS
28
9-89

Location

Loc Qty

Loc Code

over003

188

153844

188

ST350

49

M134955

49

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

AN44-5A
AN44-5A
Eyebolt

Purchased No

100 Each 23.0000 2 2
**

DAS
28
9-89

Location

Loc Qty

Loc Code

ST339

23

m135774
m136047

11
12

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

AN4C7A
AN4C7A
BOLT

Purchased No

100 Each 90.0000 2 2
**

DAS
28
9-89

Location

Loc Qty

Loc Code

OVER002

54

m136295

54

ST345

36

m135864

36

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : ☐						

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

AN665-34R Purchased No
AN665-34R
Clevis

100 Each 49.0000 2 2
**

DAS 6 9-89
FEB 21 2017
DAS 27 9-89

DAS 28 9-89

Location Loc Qty Loc Code

over008 47
153852 47
ST330 2
M136182 2

CCR264SS3-02 Purchased No
CCR264SS3-02
Cherry Rivet

100 Each 361.0000 36 36
**

DAS 6 9-89
FEB 21 2017
DAS 27 9-89

DAS 28 9-89

Location Loc Qty Loc Code

ST321 361
M136047 136
M136648 225

CR3213-5-3 Purchased No
CR3213-5-3
Cherry Rivet

100 Each 144.0000 14 14
**

DAS 6 9-89
FEB 21 2017
DAS 27 9-89

DAS 28 9-89

Location Loc Qty Loc Code

CCK003 100
m136537 100
ST319 44
m135865 44

MS20426AD5-7 Purchased No
MS20426AD5-7
RIVET

100 Each 1,504.000 2 2
**

DAS 6 9-89
FEB 21 2017
DAS 27 9-89

DAS 28 9-89

Location Loc Qty Loc Code

CCK004 703
153848 703
ST311 801
M133922 801

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS20470AD5-5.5 Purchased No
MS20470AD5-5 5
 Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

766

766.0000

8

8

**

DAS
6
9-89

DAS
27
9-89

MS20470AD5-6 Purchased No
MS20470AD5-6
 RIVET

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

766

656.0000

8

8

**

DAS
6
9-89

DAS
27
9-89

MS20470AD5-7 Purchased No
MS20470AD5-7
 Rivet

DAS
28
9-89

Location

Loc Qty

Loc Code

ST309

656

392.0000

3

3

**

DAS
6
9-89

DAS
27
9-89

MS21042-08 MS21042L08 Purchased No
MS21042-08
 USE MS21042L08

DAS
28
9-89

123425

392

0.0000

2

2

**

DAS
6
9-89

DAS
27
9-89

MS21042-3 MS21042L3 Purchased No
MS21042-3
 Nut

DAS
28
9-89

123425

392

0.0000

2

2

**

DAS
6
9-89

DAS
27
9-89

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DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By 		
							Lead hand / Supervisor Approval Verification 		
							QC / QA Coordinator Approval 		

Root Cause				FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due	☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter	☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes	☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center	☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence		
☐ OTHER : _____							

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

100

Each

1,988.000

61

61

MS21042L3

Nut

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

100

m135945

100

GA

158

m134360

108

m135135

50

OVER007

1000

M136554

500

M136665

500

ST303

730

M136044

11

M136192

219

M136406

500

136838x57

MS21042L4

Purchased

No

100

Each

2,472.000

2

2

MS21042L4

Nut

DAS
6
9-89

DAS
27
9-89

FEB 21 2017

DAS
28
9-89

Location

Loc Qty

Loc Code

FP001

18

m133363

18

GA

187

m135058

187

OVER007

500

m136450

500

ST303

1767

m136182

267

m136648

1500

2

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

Picklist Print

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS21047-3 Purchased No 100 Each 118.0000 18 18
MS21047-3
 Nut Plate

DAS
28
9-89

Location

Loc Qty

Loc Code

ST301

118

m136047

28

m136442

90

MS24693-C278 Purchased No 100 Each 100.0000 5 5
MS24693-C278
 Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST287

100

m136554

100

MS24694-S51 Purchased No 100 Each 112.0000 5 5
MS24694-S51
 Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

112

m135442

112

MS24694-S54 Purchased No 100 Each 233.0000 2 2
MS24694-S54
 SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

ST284

233

153846

157

m135948

76

DAS
6
9-89

FEB 21 2017 DAS 27 9-89

DAS
6
9-89

FEB 21 2017 DAS 27 9-89

DAS
6
9-89

FEB 21 2017 DAS 27 9-89

DAS
6
9-89

FEB 21 2017 DAS 27 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width: 100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																						
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																						
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																						
Large Fab ☐	Composite ☐	Supplier ☐																							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																		
Description Work Order Deviation				Disposition				Completed By																	
								Lead hand / Supervisor Approval Verification																	
								QC / QA Coordinator Approval																	
Root Cause		FAULT CATEGORY																							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			OTHER : ☐																	

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS24694-S55

Purchased

No

100

Each

338.0000

3

3

MS24694-S55

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

247

153847

247

ST283

91

m136042

91

3

MS27039-08-13

Purchased

No

100

Each

396.0000

2

2

MS27039-08-13

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

over006

325

153849

325

ST278

71

m136199

71

2

MS27039-1-10

Purchased

No

100

Each

289.0000

2

2

MS27039-1-10

SCREW

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

17

m129541

17

ST280

272

m135774

272

2

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-12

Purchased

No

100

Each

124.0000

6

6

MS27039-1-12

Screw

**

DAS
6
9-89

FEB 21 2017
DAS
2
9-89

Location

Loc Qty

Loc Code

over006

100

m136537

100

ST280

24

m135566

24

MS27039-1-16

Purchased

No

100

Each

120.0000

24

24

MS27039-1-16

Screw

**

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

ST280

120

m136301

20

m136537

100

MS27039-1-19

Purchased

No

100

Each

279.0000

22

22

MS27039-1-19

Screw

**

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

Location

Loc Qty

Loc Code

GA

80

m134134

80

over006

170

m136648

170

ST280

29

m136182

29

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Friday, January 27, 2017 12:51:08 PM

Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-20

Purchased

No

100

Each

123.0000

2

2

MS27039-1-20

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

123

124326

23

m136554

100

MS27039-1-21

Purchased

No

100

Each

199.0000

4

4

MS27039-1-21

Screw

DAS
28
9-89

Location

Loc Qty

Loc Code

ST280

199

m127904

199

NAS1149F0332P

Purchased

No

100

Each

2,044.000

144

144

NAS1149F0332P

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

343

m133709

343

ST262

1701

m135948

5

m136442

1696

NAS1149F0363P

Purchased

No

100

Each

130.0000

2

2

NAS1149F0363P

WASHER

DAS
28
9-89

Location

Loc Qty

Loc Code

ST262

130

124555

130

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

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Work Order ID: 156265

156265

Parent Item: 646.4001

646 4001

Parent Item Name: AS350 Cable Cutter System

Start Date: 2/1/2017

Required Date: 2/8/2017

Start Qty: 1.00

Required Qty: 1.00

NAS1149F0432P

Purchased

No

100

Each

1,573.000

4

4

NAS1149F0432P

WASHER

**

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

DAS
28
9-89

Location

Loc Qty

Loc Code

ST260a

1000

M136442

1000

ST262

573

M135704

573

100

Each

1,287.000

4

4

**

DAS
6
9-89

FEB 21 2017
DAS
27
9-89

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

DAS
28
9-89

Location

Loc Qty

Loc Code

GA

564

M135058

232

M136182

332

ST263

723

M136182

723

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								



APICAL INDUSTRIES, INC.
dba DART AEROSPACE

ENGINEERING CHANGE NOTICE NO.

05304

SHEET 1 OF 1

DWG NO. 646.4000

REV: C

PREPARED BY J. BECKER

DATE: 02/04/16

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: AS350 CABLE CUTTERS KIT

APPROVED BY:

ENGR

MFG

QC

EFF. NEXT ORDER

TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: REVISED F/N 12.

ECR:
N/A

ACTION ITEM:
1. N/A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 156265 ML5
17-02-01

SHEET 1, BOM IS:

12	R	601.1624	8	16	LOCKNUT	MS21042L3	
F/N	TC	PART NUMBER	4006	4005	DESCRIPTION	MATERIAL	SPECIFICATION
			QTY				
DOCUMENTS EFFECTED:					CHANGE CATEGORY	DER REVIEW REQUIRED	
☐ PATTERN ☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☒ BOM					☐ MAJOR ☒ MINOR	☐ YES ☒ NO	

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF APICAL INDUSTRIES DBA DART AEROSPACE. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE EXPLICIT WRITTEN PERMISSION OF APICAL INDUSTRIES DBA DART AEROSPACE IS PROHIBITED.

NOTES:

1 AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILET EDGES.

2 INSTALL F/N 14 WITH F/N 52 & 53.

3 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR P/N 75935A651.

4 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES P/N D21200-24216.

5 REUSE FASTENERS FROM F/N 1.

6 USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.

7 AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.

8 INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 78 SCREW IN PLACE OF F/N 17 SCREW.

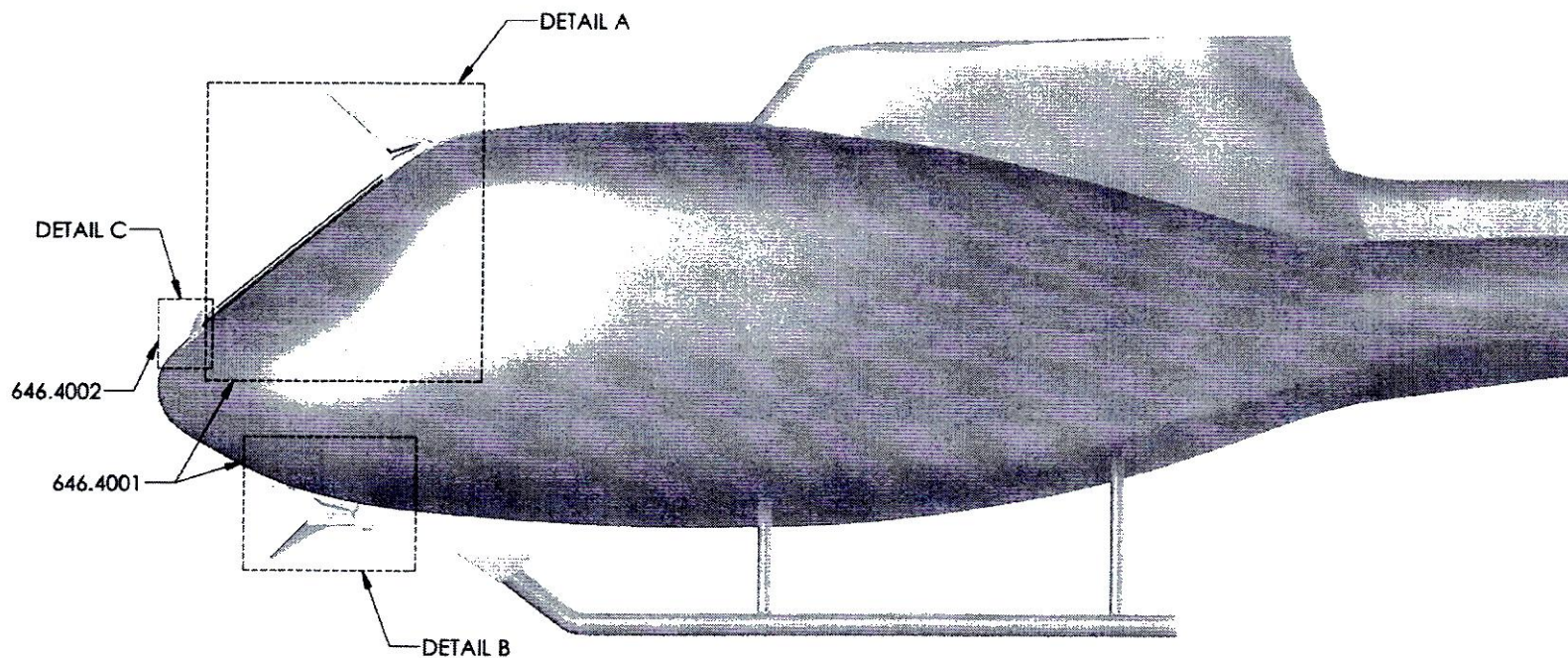
9 NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(S)

05304

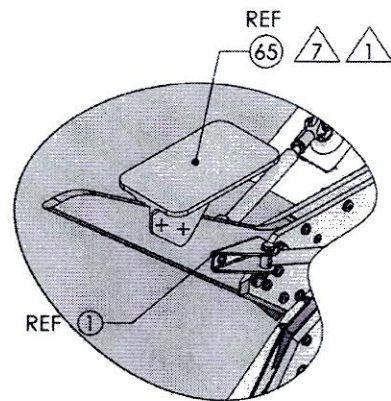
5	5	5	78	601.3875	SCREW	ASAP/ECN/DEL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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	2	2	75	601.2973	LOCKNUT	MS21042-08																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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	2	2	73	601.2943	LOCKNUT	MS21042-3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	2	2	72	601.3128	NUT	AN3114C4R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	2	2	71	601.3209	LOCKNUT	MS21042-4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	4	4	70	601.2630	WASHER	NAS1149F0303P																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	2	2	69	601.2669	BOLT	ANAC7A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	2	2	68	601.3119	CLEVIS	AN665-34R																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
	2	2	67	601.3121	EYE BOLT	AN66-5A																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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	5	5	56	600.1013	PRIMER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
	8 FT	8 FT	55	600.0129	VHB TAPE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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	2	2	43	601.1952	SCREW	MS21039-1-20																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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4006	4005	4004	4003	4002	4001	4000	3999	3998	3997	3996	3995	3994	3993	3992	3991	3990	3989	3988	3987	3986	3985	3984	3983	3982	3981	3980	3979	3978	3977	3976	3975	3974	3973	3972	3971	3970	3969	3968	3967	3966	3965	3964	3963	3962	3961	3960	3959	3958	3957	3956	3955	3954	3953	3952	3951	3950	3949	3948	3947	3946	3945	3944	3943	3942	3941	3940	3939	3938	3937	3936	3935	3934	3933	3932	3931	3930	3929	3928	3927	3926	3925	3924	3923	3922	3921	3920	3919	3918	3917	3916	3915	3914	3913	3912	3911	3910	3909	3908	3907	3906	3905	3904	3903	3902	3901	3900	3899	3898	3897	3896	3895	3894	3893	3892	3891	3890	3889	3888	3887	3886	3885	3884	3883	3882	3881	3880	3879	3878	3877	3876	3875	3874	3873	3872	3871	3870	3869	3868	3867	3866	3865	3864	3863	3862	3861	3860	3859	3858	3857	3856	3855	3854	3853	3852	3851	3850	3849	3848	3847	3846	3845	3844	3843	3842	3841	3840	3839	3838	3837	3836	3835	3834	3833	3832	3831	3830	3829	3828	3827	3826	3825	3824	3823	3822	3821	3820	3819	3818	3817	3816	3815	3814	3813	3812	3811	3810	3809	3808	3807	3806	3805	3804	3803	3802	3801	3800	3799	3798	3797	3796	3795	3794	3793	3792	3791	3790	3789	3788	3787	3786	3785	3784	3783	3782	3781	3780	3779	3778	3777	3776	3775	3774	3773	3772	3771	3770	3769	3768	3767	3766	3765	3764	3763	3762	3761	3760	3759	3758	3757	3756	3755	3754	3753	3752	3751	3750	3749	3748	3747	3746	3745	3744	3743	3742	3741	3740	3739	3738	3737	3736	3735	3734	3733	3732	3731	3730	3729	3728	3727	3726	3725	3724	3723	3722	3721	3720	3719	3718	3717	3716	3715	3714	3713	3712	3711	3710	3709	3708	3707	3706	3705	3704	3703	3702	3701	3700	3699	3698	3697	3696	3695	3694	3693	3692	3691	3690	3689	3688	3687	3686	3685	3684	3683	3682	3681	3680	3679	3678	3677	3676	3675	3674	3673	3672	3671	3670	3669	3668	3667	3666	3665	3664	3663	3662	3661	3660	3659	3658	3657	3656	3655	3654	3653	3652	3651	3650	3649	3648	3647	3646	3645	3644	3643	3642	3641	3640	3639	3638	3637	3636	3635	3634	3633	3632	3631	3630	3629	3628	3627	3626	3625	3624	3623	3622	3621	3620	3619	3618	3617	3616	3615	3614	3613	3612	3611	3610	3609	3608	3607	3606	3605	3604	3603	3602	3601	3600	3599	3598	3597	3596	3595	3594	3593	3592	3591	3590	3589	3588	3587	3586	3585	3584	3583	3582	3581	3580	3579	3578	3577	3576	3575	3574	3573	3572	3571	3570	3569	3568	3567	3566	3565	3564	3563	3562	3561	3560	3559	3558	3557	3556	3555	3554	3553	3552	3551	3550	3549	3548	3547	3546	3545	3544	3543	3542	3541	3540	3539	3538	3537	3536	3535	3534	3533	3532	3531	3530	3529	3528	3527	3526	3525	3524	3523	3522	3521	3520	3519	3518	3517	3516	3515	3514	3513	3512	3511	3510	3509	3508	3507	3506	3505	3504	3503	3502	3501	3500	3499	3498	3497	3496	3495	3494	3493	3492	3491	3490	3489	3488	3487	3486	3485	3484	3483	3482	3481	3480	3479	3478	3477	3476	3475	3474	3473	3472	3471	3470	3469	3468	3467	3466	3465	3464	3463	3462	3461	3460	3459	3458	3457	3456	3455	3454	3453	3452	3451	3450	3449	3448	3447	3446	3445	3444	3443	3442	3441	3440	3439	3438	3437	3436	3435	3434	3433	3432	3431	3430	3429	3428	3427	3426	3425	3424	3423	3422	3421	3420	3419	3418	3417	3416	3415	3414	3413	3412	3411	3410	3409	3408	3407	3406	3405	3404	3403	3402	3401	3400	3399	3398	3397	3396	3395	3394	3393	3392	3391	3390	3389	3388	3387	3386	3385	3384	3383	3382	3381	3380	3379	3378	3377	3376	3375	3374	3373	3372	3371	3370	3369	3368	3367	3366	3365	3364	3363	3362	3361	3360	3359	3358	3357	3356	3355	3354	3353	3352	3351	3350	3349	3348	3347	3346	3345	3344	3343	3342	3341	3340	3339	3338	3337	3336	3335	3334	3333	3332	3331	3330	3329	3328	3327	3326	3325	3324	3323	3322	3321	3320	3319	3318	3317	3316	3315	3314	3313	3312	3311	3310	3309	3308	3307	3306	3305	3304	3303	3302	3301	3300	3299	3298	3297	3296	3295	3294	3293	3292	3291	3290	3289	3288	3287	3286	3285	3284	3283	3282	3281	3280	3279	3278	3277	3276	3275	3274	3273	3272	3271	3270	3269	3268	3267	3266	3265	3264	3263	3262	3261	3260	3259	3258	3257	3256	3255	3254	3253	3252	3251	3250	3249	3248	3247	3246	3245	3244	3243	3242	3241	3240	3239	3238	3237	3236	3235	3234	3233	3232	3231	3230	3229	3228	3227	3226	3225	3224	3223	3222	3221	3220	3219	3218	3217	3216	3215	3214	3213	3212	3211	3210	3209	3208	3207	3206	3205	3204	3203	3202	3201	3200	3199	3198	3197	3196	3195	3194	3193	3192	3191	3190	3189	3188	3187	3186	3185	3184	3183	3182	3181	3180	3179	3178	3177	3176	3175	3174	3173	3172	3171	3170	3169	3168	3167	3166	3165	3164	3163	3162	3161	3160	3159	3158	3157	3156	3155	3154	3153	3152	3151	3150	3149	3148	3147	3146	3145	3144	3143	3142	3141	3140	3139	3138	3137	3136	3135	3134	3133	3132	3131	3130	3129	3128	3127	3126	3125	3124	3123	3122	3121	3120	3119	3118	3117	3116	3115	3114	3113	3112	3111	3110	3109	3108	3107	3106	3105	3104	3103	3102	3101	3100	3099	3098	3097	3096	3095	3094	3093	3092	3091	3090	3089	3088	3087	3086	3085	3084	3083	3082	3081	3080	3079	3078	3077	3076	3075	3074	3073	3072	3071	3070	3069	3068	3067	3066	3065	3064	3063	3062	3061	3060	3059	3058	3057	3056	3055	3054	3053	3052	3051	3050	3049	3048	3047	3046	3045	3044	3043	3042	3041	3040	3039	3038	3037	3036	3035	3034	3033	3032	3031	3030	3029	3028	3027	3026	3025	3024	3023	3022	3021	3020	3019	3018	3017	3016	3015	3014	3013	3012	3011	3010	3009	3008	3007	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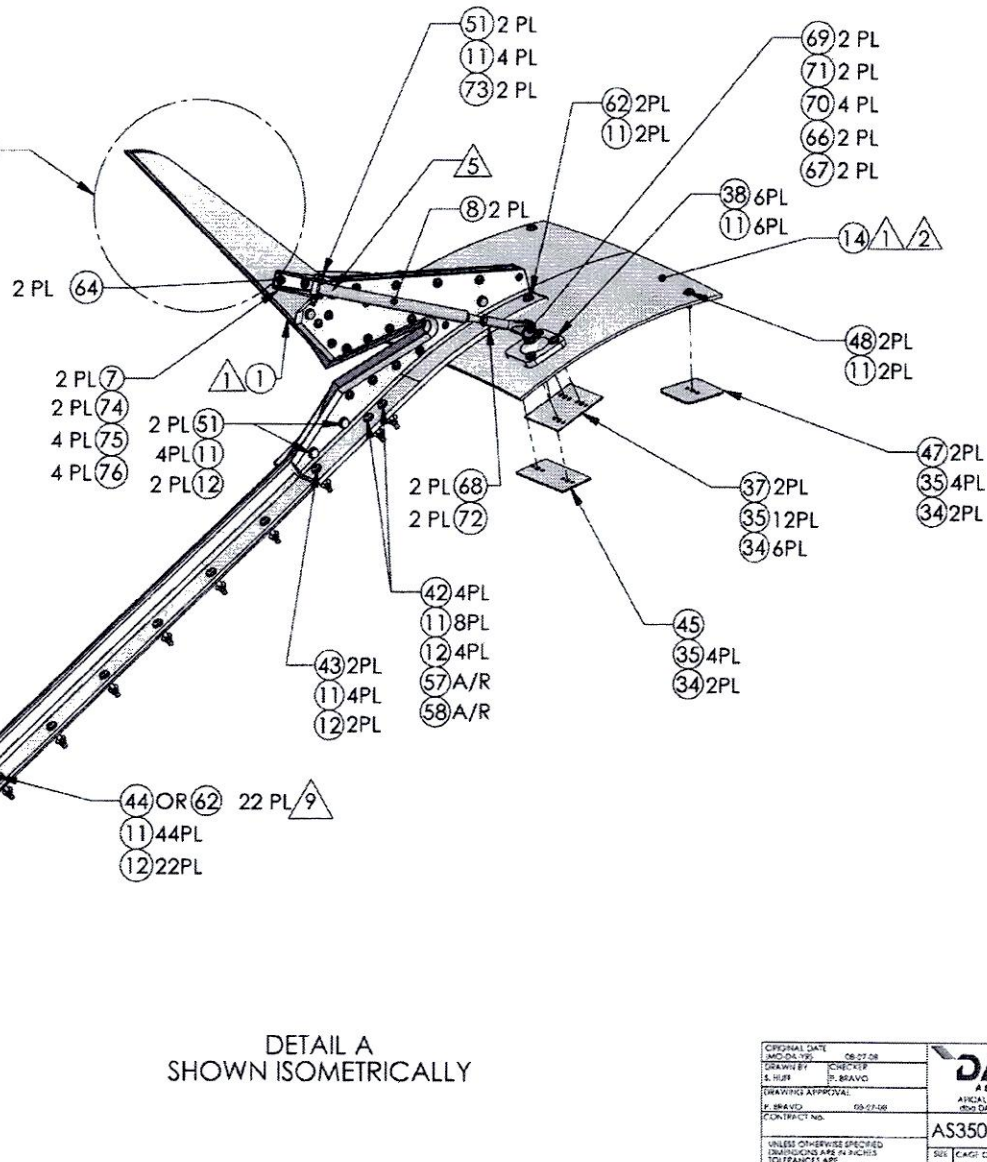
ORIGINAL DATE 08-27-09		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. HUBB	CHECKED BY J. BRAY	DART AEROSPACE APCAL INDUSTRIES INC. DART AEROSPACE	
DRAWING APPROVAL P. BRAY		AS350 CABLE CUTTERS KIT	
PROJECT NO.		SHEET 8	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE 2 PLACE DECIMALS ±.015 3 PLACE DECIMALS ±.005 ANGLES ±.5°		CAGE CODE 07M26	DWG. NO. 646.4000
		SCALE NONE	SHEET 2 OF 5

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DETAIL D
TYPICAL GPS MOUNT KIT INSTALLATION

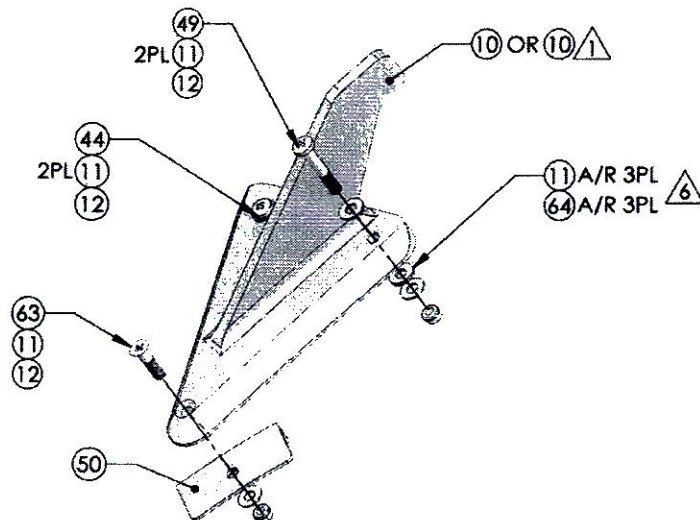
DETAIL D



DETAIL A
SHOWN ISOMETRICALLY

ORIGINAL DATE 08-27-08		3030 ENTERPRISE CT., SUITE A VISTA, CA. 92081 (760)-724-5300	
DRAWN BY S. HUBB	CHECKED BY D. BRADY	DART AEROSPACE APICAL INDUSTRIES DSA DART AEROSPACE	
DRAWING APPROVAL			
P. BRAVO	08-27-08	AS350 CABLE CUTTERS KIT	
CONTRACT NO.		SUB B	REV C
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS ±.01 ANGLES ±.5°		DWG. NO. 646.4000	SHEET 3 OF 3
SCALE NONE			

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DETAIL C
LH SHOWN EXPLODED
RH OPPOSITE

ORIGINAL DATE 08-27-09		DART 3030 ENTERPRISE CT. SUITE A VISTA, CA 92081 (760)-724-5300	
DRAWN BY S. HUN		CHECKED BY P. BRAY	
DRAWING APPROVAL P. BRAY		APPROVAL P. BRAY	
CONTROL NO.		AS350 CABLE CUTTERS KIT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS .010 3 PLACE DECIMALS .005 ANGLES 2.5°		REV. 8 07M26 646.4000 C	SCALE NONE SHEET 5 OF 5

REFERENCE ONLY

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NOTES:

1. AFTER INSTALLATION, APPLY F/N 54 A/R TO FILL GAPS AND FILLET EDGES.
2. INSTALL F/N 14 WITH F/N 52 & 53.
3. 3M VHB ADHESIVE TAPE .025" THICK X .50" WIDE
VENDOR: MCMASTER-CARR F/N 75935A651.
4. 3M TAPE PRIMER 94, APPLY TO BOTH SURFACES A/R BEFORE TAPE.
VENDOR: R.S. HUGHES F/N 021200-24216.
5. REUSE FASTENERS FROM F/N 1.
6. USE WASHERS A/R AS SHIMS TO OBTAIN BEST FITMENT.
7. AT CUSTOMERS OPTION, INSTALL F/N 65 BY MATCH DRILLING ON TO F/N 1.
8. INSTALL SHIM IF OEM PROVISIONS ARE INSTALLED ON AIRCRAFT. REMOVE SHIM LAYERS TO ACHIEVE CORRECT SIZE. MATCH DRILL HOLES. USE F/N 71 SCREW IN PLACE OF F/N 17 SCREW.
9. NEWER INSTALLATIONS ON AIRCRAFT WITH UPDATED CANOPY MAY REQUIRE DIFFERENT LENGTH SCREWS. USE F/N 62 TO REPLACE F/N 44 & F/N 26 IN PLACE OF F/N 41 WHEN NECESSARY.

UNINCORPORATED ECN(s)

0.5304

5	5	5	78	601.3875	SCREW	MAGNABOND	△			
1	1	1	77	646.9410	SHIM		△			
	4	4	76	601.2764	WASHER	NAS114PH832P				
	2	2	75	601.2973	LOCKNUT	MS21042-05				
	2	2	74	601.2988	SCREW	MS27039-0813				
	2	2	73	601.2943	LOCKNUT	MS21042-3				
	2	2	72	601.3128	NUT	ANS1624R				
	2	2	71	601.3209	LOCKNUT	MS21040-1				
	4	4	70	601.2638	WASHER	NAS114PFO432P				
	2	2	69	601.2669	BOLT	ANAC7A				
	2	2	68	601.3119	CLEVIS	AN665-34P				
	2	2	67	601.3121	EYE BOLT	AN665-5A				
	2	2	66	650.9201	EYE BRACKET ASSY					
REF	REF	REF	65	647.5701	GPS MOUNT KIT		△			
		2	64	601.3151	WASHER	NAS114PH0330P				
		2	63	601.2911	SCREW	MS2449MS53				
	24	24	62	601.2637	SCREW	MS27039-1-16				
2	2	2	61	601.2763	BOLT	ANQ-12A				
	1	1	60	646.3913	SHIM					
	4	4	59	646.3912	SHIM					
	1	1	58	646.3911	SHIM					
	4	4	57	646.3910	SHIM					
	5	5	56	600.1013	PRIMER					
8 FT		8 FT	55	600.0129	VHS TAPE					
	1	1	54	600.1012	SEALANT	PR-1025 CLASS B				
	1	1	53	600.0991	MAGNABOND 6098 PART B		△			
	1	1	52	600.0990	MAGNABOND 6098 PART A		△			
6	10	10	51	601.2826	BOLT	A103-11A				
			50	646.3814	WIPER BRACKET					
		2	49	601.2910	SCREW	MS27039-1-16				
2		2	48	601.1365	SCREW	MS27039-1-10				
2		2	47	646.3719	DOUBLER					
	2	2	46	646.3718	CUSTOM WASHER					
1		1	45	646.3717	DOUBLER					
	22	2	44	601.1948	SCREW	MS27039-1-19				
	2	2	43	601.1952	SCREW	MS27039-1-20				
	4	4	42	601.1956	SCREW	MS27039-1-21				
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
A	INCORPORATED ECH 02199, 02351, 02711 & 02745	02/08/2010	P. BRAVO
B	INCORPORATED ECH 03046, 03079 & 04071	11/04/2014	P. BRAVO
C	INCORPORATED ECH 03098	01/06/2015	P. BRAVO

		2			2	41	601.2829	SCREW	MS2469AS54	
		2			2	40	601.2831	RIVET	MS20426ADS-7	
		1			1	39	646.3716	GAUGE BRACKET		
		6			6	38	601.1953	SCREW	MS27029-1+12	
	2	2			2	37	646.3715	STRUT DOUBLER		
		2			2	36	601.2824	BOLT	AN2-5A	
12	36				36	35	601.2277	RIVET	CC846485-349	
6	18				18	34	600.0795	NUTPLATE	MS27047-3	
3	3				3	33	601.2565	RIVET	MS20470ADS-7	
1	1				1	32	646.3613	STRUT BRACKET		
4	4				4	31	601.2822	BOLT	AN2-3A	
2	2				2	30	646.3812	GUSSET BRACKET		
8	8				8	29	601.2564	RIVET	MS20470ADS-6	
1	1				1	28	646.3714	GUSSET		
	1	1			1	27	646.3610	FILLER		
	3	3			3	26	601.2830	SCREW	MS2469AS55	
	2	2			2	25	601.2825	BOLT	AN2-6A	
	1	1			1	24	646.3611	RADIUS BLOCK		
	1	1			1	23	646.3712	CLIP		
	1	1			1	22	646.3711	CLIP		
8	8				8	21	601.2832	RIVET	MS2046DS-6A	
14	14				14	20	601.2020	RIVET	CR3213-6-3	
4	6	4	6		10	19	601.2823	BOLT	AN2-4A	
	1	1	1		1	18	601.2827	BOLT	AN2-13A	
	5	5			5	17	601.2912	SCREW	MS2469AS51	
	1	1			1	16	646.3713	GUSSET		
	1	1			1	15	646.3210	SUPPORT		
		1			1	14	646.3710	DOUBLER		
	1	1			1	13	646.3110	CHANNEL		
14	10	8	53	6	61	12	601.1624	LOCKNUT	MS21042L3	
16	32	16	120	16	144	11	601.1607	WASHER	NAS118PH233P	
				1		10	646.3410	LH WIPER DEFLECTOR		
						9	646.3411	RH WIPER DEFLECTOR		
		2			2	8	647.7703	STRUT ASSY		
		2			2	7	647.0112	STRUT BRACKET		
	1	1			1	6	646.3511	STRUT		
	1	1			1	5	646.3510	STRUT		
2	2				2	4	646.3810	BRACKET		
		1			1	3	645.2910	DEFLECTOR		
	1	1			1	2	646.3001	LOWER CUTTER ASSY		
		1			1		646.3301	UPPER CUTTER ASSY		
X							646.4006	LOWER CUTTER FIXED PROVISIONS KIT		
	X						646.4005	LOWER CUTTER REMOVABLE PROVISIONS KIT		
		X					646.4004	FIXED PROVISIONS KIT		
			X				646.4003	CABLE CUTTER 1/2 W/400T FIXED PROVISIONS		
				X			646.4002	ASS300 WIPER DEFLECTOR KIT		
					X		646.4001	ASS300 CABLE CUTTERS KIT		
4006	4005	4004	4003	4002	4001	FIND #	PART #	DESCRIPTION	MATL	SPEC.

QTY		PARTS LIST	
NEXT ACTION (S)		 3030 ENTERPRISE CT., SUITE A OAKLAND, CA 94618 (415) 724-5300	
ORIGINAL DATE: 10-24-78 BY: JF/GB DRAWN BY: J. COCKER S. HUFF CHECKED BY: P. BRAYVO P. BRAYVO DATE: 11-1-78 (BY PURCHASER) (N)		AFFIL INDUSTRIES, INC. 1050 CHIMNEY ROCK RD. CHIMNEY ROCK, NC 27815	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. FINISH DIMENSIONS: ± .001 2. HOLE DIMENSIONS: ± .005 3. HOLE & SLOTS: ± .005		A530 CASE CUTTERS KIT	
171 B		SIZE: C40F COM NO. B D7M26	QTY: 1 646.4000 SCALE: NONE SHEET 1 OF 5